

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500

November 11, 2003

NASA Kennedy Space Center Mail Code TA-C3 Orlando, FL 32899

SUBJECT:

Consumptive Use Permit Number 50054

Kennedy Space Center

Dear Sir/Madam:

Enclosed is your permit and the forms necessary for submitting information to comply with conditions of the permit as authorized by the St. Johns River Water Management District on November 11, 2003.

Please be advised that the period of time within which a third party may request an administrative hearing on this permit may not have expired by the date of issuance. A potential petitioner has twenty-six (26) days from the date on which the actual notice is deposited in the mail, or twenty-one (21) days from publication of this notice when actual notice is not provided, within which to file a petition for an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes. Receipt of such a petition by the District may result in this permit becoming null and void.

Permit issuance does not relieve you from the responsibility of obtaining permits from any federal, state and/or local agencies asserting concurrent jurisdiction over this work.

The enclosed permit is a legal document and should be kept with your other important records. Please read the permit and conditions carefully since the referenced conditions may require submittal of additional information. All information submitted as compliance with permit conditions must be submitted to the nearest District Service Center and should include the above referenced permit number.

Sincerely,

Gloria Lewis, Director

Permit Data Services Division

Enclosures: Permit, Conditions for Issuance, Compliance Forms, Map, Well Tags

cc: District Permit File

vie Gean Lewis

DATE ISSUED: November 11, 2003

PERMIT NO. 50054

PROJECT NAME: Kennedy Space Center

A PERMIT AUTHORIZING:

The District authorizes, as limited by the attached permit conditions, the use of 340.00 million gallons per year (0.932 million gallons per day average) of water from the City of Cocoa for secondary public supply use in 2023, 0.04 million gallons per year (0.0001 million gallons per day average) of water from the City of Titusville for household use, 9.43 mgy (0.026 million gallons per day average) combined of ground water from the Floridan aquifer and the surficial aquifer system for household, industrial and aesthetic uses, and 3.80 million gallons per year (0.010 million gallons per day average) for freeze protecting 20 acres of citrus at a 10.17 square mile Federal space agency installation.

LOCATION:

Site: Kennedy Space Center

Brevard, Volusia Counties

Section(s):	35 1, 2, 4, 9, 12, 16, 17, 20, 21, 26, 27, 28, 29, 31,	Township(s):	18S 19S	Range(s):	35E 35E
	32, 33, 34, 35 19, 29, 30, 31,		19S		36E
	32 1, 2, 3, 4, 5, 8, 10, 11, 12, 13, 14, 24		20\$		35E
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	25, 26, 35, 36 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36		21S		36E
	6, 7, 8, 17, 18, 19, 20, 21, 27, 28, 29, 30, 31, 32, 33, 34		21S		37E
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34, 35, 36 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33	22\$	37E
1, 2, 3, 4, 10, 11, 12, 13, 14	23S	36E
12, 13, 14 1, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 16, 17, 18, 19, 20, 23, 26, 29, 30, 31, 32, 35	23\$	37E
2, 6, 7, 10, 11	24S	37E

ISSUED TO:

NASA Kennedy Space Center Mail Code TA-C3 Orlando, FL 32899

Permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all maps and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to permittee any property rights nor any rights of privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes and 40C-1, Florida Administrative Code.

PERMIT IS CONDITIONED UPON:

See conditions on attached "Exhibit A", dated November 11, 2003

AUTHORIZED BY: St. Johns River Water Management District

Department of Resource Management

Harold A Wilkening III

Director

Kirby B. Green, M

Executive Director

"EXHIBIT A" CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 50054 NASA KENNEDY SPACE CENTER DATED NOVEMBER 11, 2003

- 1. District Authorized staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications and conditions of this permit.
- 2. Nothing in this permit should be construed to limit the authority of the St. Johns River Water Management District to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event a water shortage, is declared by the District Governing Board, the permittee must adhere to the water shortage restriction as specified by the District, even though the specified water shortage restrictions may be inconsistent with the terms and conditions of this permit.
- 3. Prior to the construction, modification, or abandonment of a well, the permittee must obtain a Water Well Construction Permit from the St. Johns River Water Management District, or the appropriate local government pursuant to Chapter 40C-3, Florida Administrative Code. Construction, modification, or abandonment of a well will require modification of the consumptive use permit when such construction, modification or abandonment is other than that specified and described on the consumptive use permit application form.
- 4. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to eliminate the leak or make the system fully operational.
- 5. Legal uses of water existing at the time of the permit application may not be interfered with by the consumptive use. If unanticipated interference occurs, the District may revoke the permit in whole or in part to curtail or abate the interference unless the permittee mitigates for the interference. In those cases where other permit holders are identified by the District as also contributing to the interference, the permittee may choose to mitigate in a cooperative effort with these other permittees. The permittee must submit a mitigation plan to the District for approval prior to implementing such mitigation.
- 6. Off-site land uses existing at the time of permit application may not be significantly adversely impacted as a result of the consumptive use. If unanticipated significant adverse impacts occur, the District shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee.
- 7. The District must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of a well or facility from which the permitted consumptive use is made or within 30 days of any transfer of ownership or control of the real property at which the permitted consumptive use is located. All transfers of ownership or transfers of permits are subject to the provisions of section 40C-1.612, Florida Administrative Code.
- 8. A District-issued identification tag shall be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Permittee shall notify the District in the event that a replacement tag is needed.
- If the permittee does not serve a new projected demand located within the service area upon which the annual allocation was calculated, the annual allocation will be subject to modification.

- 10. Landscape irrigation is prohibited between the hours of 10:00 a.m. and 4:00 p.m., except as follows:
 - (a) Irrigation using a micro-irrigation system is allowed anytime.
 - (b) The use of reclaimed water for irrigation is allowed anytime, provided appropriate signs are placed on the property to inform the general public and District enforcement personnel of such use. Such signs must be in accordance with local restrictions.
 - (c) Irrigation of, or in preparation for planting, new landscape is allowed any time of day for one 30 day period provided irrigation is limited to the amount necessary for plant establishment.
 - (d) Watering in of chemicals, including insecticides, pesticides, fertilizers, fungicides, and herbicides when required by law, the manufacturer, or best management practices is allowed anytime within 24 hours of application.
 - (e) Irrigation systems may be operated anytime for maintenance and repair purposes not to exceed ten minutes per hour per zone.
- 11. The allocations stated above may be exceeded when the permittee must use water for freeze protection. Freeze protection is defined as the periodic and infrequent use of water to protect agricultural and nursery crops from permanent damage due to low temperatures. This action would be taken in response to forecasts of freezing temperatures by weather forecasting services. The permittee must maintain records of when water withdrawals for freeze protection are taking place, including the date of such withdrawal, duration of each withdrawal, and the rate at which withdrawals are raking place. These records must be submitted along with any required withdrawal records.
- 12. All submittals to the District for demonstrating compliance with the conditions issued under this permit must include the CUP Number 50054 plainly labeled.
- 13. This permit will expire 20 years from the date of issuance.
- 14. This permit authorizes the use of Well HQ Pond (GRS ID 35272) for aesthetic (pond augmentation) use. This well is not authorized for any use other than the type of use provided under this permit.
- 15. This permit authorizes the use of Well M6-584 (GRS ID 35271), Well 39A LOX (GRS ID 35273), Well 39B LOX (GRS ID 35274), H4-1797D (GRS ID 35288), C2-1060 (GRS ID 35289) and G5-1061 (GRS ID 35290) for industrial use. These wells are not authorized for any use other than the type of use provided under this permit.
- 16. This permit authorizes the use of Q6-82 (GRS ID 35279), Tank (GRS ID 35280), J6-553 (GRS ID 35281), A F5-2151 (GRS ID 35282), and H4-1797 (GRS ID 35287) for household use. These wells are not authorized for any use other than the type of use provided under this permit.
- 17. This permit authorizes the use of Well BR0612 (GRS ID 35267), Well BR0617 (GRS ID 35628), Well BR0620 (GRS ID 35269) and Well BR1536 (GRS ID 35270) for citrus freeze protection. These wells are not authorized for any use other than the type of use provided under this permit.
- 18. Maximum annual use of water supplied from the City of Cocoa for secondary public supply use must not exceed as follows:
 - 311.24 million gallons (0.853 million gallons per day average) in 2003,
 - 312.45 million gallons (0.856 million gallons per day average) in 2004,
 - 313.69 million gallons (0.860 million gallons per day average) in 2005,
 - 314.94 million gallons (0.863 million gallons per day average) in 2006.
 - 316.23 million gallons (0.866 million gallons per day average) in 2007,
 - 317.53 million gallons (0.870 million gallons per day average) in 2008,

318.86 million gallons (0.874 million gallons per day average) in 2009, 320.20 million gallons (0.853 million gallons per day average) in 2010, 321.57 million gallons (0.877 million gallons per day average) in 2011, 322.97 million gallons (0.885 million gallons per day average) in 2012, 324.39 million gallons (0.889 million gallons per day average) in 2013, 325.83 million gallons (0.893 million gallons per day average) in 2014, 327.31 million gallons (0.897 million gallons per day average) in 2015, 328.80 million gallons (0.901 million gallons per day average) in 2016, 330.32 million gallons (0.905 million gallons per day average) in 2017, 331.86 million gallons (0.909 million gallons per day average) in 2018, 333.44 million gallons (0.914 million gallons per day average) in 2019, 335.04 million gallons (0.918 million gallons per day average) in 2020, 336.32 million gallons (0.922 million gallons per day average) in 2021, 338.44 million gallons (0.927 million gallons per day average) in 2022, and 340.00 million gallons (0.932 million gallons per day average) in 2023.

- 19. Maximum annual use of water supplied from the City of Titusville for household use must not exceed 0.04 million gallons (0.0001 million gallons per day average).
- 20. Maximum annual use of ground water supplied from the surficial aquifer system for household, industrial and aesthetic uses must not exceed 9.34 million gallons (0.026 million gallons per day average).
- 21. Maximum annual use of ground water supplied from the Floridan aquifer for citrus freeze protection use must not exceed 3.80 million gallons (0.010 million gallons per day average).
- 22. Total flow of water through the City of Cocoa connection at Gate 2, through the City of Titusville connection at Gate 3 and through KSC-CCAFS interconnections at the East Cape Feed (at Banana River) and North Cape Feed (at LC-39A) must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of the monitoring using Form No. EN-50. The reporting dates each year will be as follows for the duration of the permit:

Reporting Period January-June July – December Report Due Date
July 31
January 31

23. Total withdrawals of ground water from the Floridan aquifer and from the surficial aquifer system for household, industrial, aesthetic and citrus freeze protection uses must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of the monitoring using a spreadsheet for tabulation or Form No. EN-50. The reporting dates each year will be as follows for the duration of the permit:

Reporting Period January-June July – December Report Due Date July 31 January 31

24. The permittee has elected to implement an alternative method for measuring ground water withdrawal from wells installed into the Floridan aquifer and the surficial aquifer system that utilizes use log records in conjunction with the maximum pumping capacity as the basis for calculating flow. The permittee may not alter the District-approved alternative method without prior written approval from the District. The method used for monitoring water use must maintain 90% accuracy and be verifiable. If after a period of one year, the District-approved alternative method does not meet the accuracy criteria, a totalizing flow meter or another District-approved alternative must be used. If a flow meter is used for monitoring water use, the meter must maintain 95% accuracy, be verifiable and installed according to manufacturer specifications. Documentation for proper installation of the flow meter may be

accomplished by a site visit by District Staff, or by submitting a copy of the manufacturer's specifications and a photograph within 30 days of meter installation.

- 25. The permittee must maintain all flow meters utilized for monitoring water flow through the City of Cocoa connection at Gate 2, the City of Titusville connection at Gate 3, and the KSC-CCAFS interconnections at the North Cape Feed (at LC-39A) and the East Cape Feed (at Banana River). In case of failure or breakdown of any meter, the District must be notified in writing within 5 days of discovery. A defective meter must be repaired or replaced within 30 days of discovery.
- 26. The permittee must have all flow meters checked for accuracy at least once every 3 years within 30 days of the anniversary date of permit issuance, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. District Form EN-51 must be submitted to the District within 10 days of the inspection/calibration.
- 27. The permittee must establish a District approved surface water elevation for the pond augmented at the Headquarters Building, and augmentation of the pond must cease when the surface water level in the pond has risen to the established reference elevation. The permittee must install a control device at the supplying well (GRS 35272) that automatically shuts off ground water flow when the surface water level in the pond has risen to the established reference elevation. If problems with off-site seepage or discharges result from maintaining the pond level at the established reference elevation, the permittee must further reduce augmentation to a level that does not contribute to off-site seepage or discharge.
- 28. The permittee must implement the water conservation plan submitted in support of this consumptive use permit application.
- 29. The permittee must use reclaimed water supplied by the CCAFS RWWTP should it become available for applications that are economically, environmentally and technologically feasible over the duration of this permit pursuant to District rules and applicable State law.
- 30. The permittee shall submit to the District compliance reports, pursuant to subsection 373.236(3), F.S., within 30 days of the 5-year, 10-year and 15-year anniversary date of the permit issuance. The reports shall contain sufficient information for demonstrating that the permittee's use of water will continue, for the remaining duration of the permit, to meet the conditions for permit issuance set forth in the District rules that existed at the time the permit was issued by the District. At a minimum, the compliance report must:
 - Meet the submittal requirements of section 4.2 of the Applicant's Handbook: Consumptive Uses of Water, February 8, 1999;
 - Include information documenting that the proposed allocations of water for secondary use are actually needed;
 - c) Include documentation verifying that the permittee is implementing all feasible water conservation measures including the use of reclaimed water supplied by the CCAFS RWWTP should it become available for applications that are economically, environmentally and technologically feasible.